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Zhodnocení finanční situace společnosti Ctrip.Com International Ltd.

Financial Situation Evaluation of the Company Ctrip.Com International Ltd

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"I hereby declare that I have elaborated the entire thesis including annexes myself."

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1 Introduction

Financial analysis is a tool, which is used to evaluate the performance and financial condition of a company, an industry and even whole economy, moreover, it is also used to predict the future performance and condition.

The company Ctrip, founded in 1999, is headquartered in Shanghai, China. Ctrip has 16 branch offices in Beijing, Guangzhou, Shenzhen and other major cities throughout China, and it currently employs more than 16,000 people. Ctrip was listed on NASDAQ on 9 December 2003. Based on continuous and steady business growth, Ctrip became the China's leading travel service company, Ctrip provides over 90 million registered members with comprehensive services including hotel reservations, flight ticketing, package tours, corporate travel management, train ticket and dining reservations. In addition, besides the Simplified Chinese and English language sites, Ctrip now has Japanese, Korean, German, French, Spanish, Russian, Vietnamese and Traditional Chinese language sites online.

The goal of the thesis is to evaluate the financial situation of Ctrip by using the data from annual reports for period 2011 to 2015.

The thesis is divided into five chapters. The first one is introduction and the last one is conclusion.

In the second chapter we will describe the theoretical methods of financial analysis. Firstly, we will introduce the common-size analysis, which is composed of horizontal common-size analysis and vertical common-size analysis. Secondly, financial ratios analysis will be introduced, we will focus on description of financial ratios groups, such as profitability ratios,

solvency ratios, liquidity ratios and activity ratios. Then, Dupont analysis and methods of influence quantification will be introduced in turn.

In the next chapter the basic characteristics of the company Ctrip are described. We mainly focus on the history, products and services, management advantages, strengths and weaknesses of Ctrip.

The Chapter four can be understood as main chapter of the whole thesis. In this part, we will evaluate the performance of the company Ctrip by using the methods described in chapter two, and the results that we will calculate and analyze should be based on financial statements of Ctrip from 2011-2015.

In the end, we will get the conclusion of the financial situation of Ctrip based on the above chapters. Through the conclusion, investors can clearly know their choices for Ctrip and managers can find their company is health or not.

2 Description of the Financial Analysis Methodology

In this chapter, we will focus on description of the financial analysis methodology. Firstly we will introduce financial statements, ie. balance sheet, income statement and cash flow statement. After that methods of financial analysis will be define. They are common-size analysis, financial ratio analysis, DuPont analysis and influence quantification This chapter is based on Fabozzi (2012).

2.1 Financial statements

Financial statements are the final results of operating, financing and investing activities of a company. Therefore, financial statements are helpful for creditors and investors to make decisions. In a word, financial statements are the foundation to assess the future earnings of a company. Next, we will discuss the balance sheet, the income statement and the cash flow statement. The financial statements and the auditors' findings are published in the firm's annual and quarterly reports sent to shareholders and the 10K and 10Q filings with the Securities and Exchange Commission (SEC). Also included in the reports, among other items, is a discussion by management, providing an overview of company events. The annual reports are much more detailed and disclose more financial information than the quarterly reports (Fabozzi, 2012 p.127)

2.1.1 Balance sheet

The balance sheet involves assets, liabilities and equity of a company, in general, this process is happened at the end of a company's fiscal year. Moreover, the balance sheet shows us the historical costs rather than the current market values. We can see he framework of balance sheet in the following image.

Image 2.1 The framework of balance sheet

+ Available -	Assets	Liabilities	+ Due -
	Current assets Cash and cash equivalents Accounts receivable Finished goods Raw materials	Current liabilities	
	Fixed assets Financial investments Tangible fixed assets Intangible assets	Long-term liabilities Equity Retained earnings	

Source: <https://www.bcv.ch/en/Corporate-Banking/Useful-tools/Managing-your-company-s-accounts>.

From the image 2.1, we can see the balance sheet follow the following formula:

$$Total\ assets = Total\ liabilities + Total\ equity \quad (2.1)$$

Assets can reflect the resources that are formed, controlled by past transactions and are owned by a company on a particular date and provide future earnings for a company, they not only can be tangible, but also can be intangible. Specifically, assets can be divided into current assets and noncurrent assets. Current assets can be converted into cash within one year, while noncurrent assets cannot be converted into cash within one year or an operating cycle.

Generally, current assets are made up of cash, marketable securities, accounts receivables and inventories. Cash consists of currency and these assets that can be converted into cash at once. Marketable securities can be immediately sold when a company is lack of cash, it means that when a company has more cash, it can invest marketable securities for depositing funds.

Accounts receivables are caused due to the consumers have purchased the company's goods or services, but they have not paid to the company. In usually, accounts receivables can be back to the company quickly. Inventories include the raw materials, in-process and finished goods of a company.

Noncurrent assets consist of tangible assets and intangible assets. Tangible assets include equipment, buildings and machines of a company, while intangible assets include copyrights, goodwill and patents.

Liabilities reflect the obligations of a company, which are caused by past transactions. In general, liabilities consist of current liabilities and long-term liabilities. Current liabilities need be paid within one year, while long-term liabilities need be paid more than one year.

Current liabilities are made up of accounts payable, short-term and current long-term debt, other current liabilities. Accounts payable are obligations for suppliers, it means that the company purchased goods or services from suppliers but not paid. Long-term liabilities are made up of notes, bonds, lease obligations and so on. Notes and bonds claim that debtors must pay periodical interest to creditors and repay the principal on the due date.

Equity is the residual interest after deducting the liabilities of the company's assets, reflecting the total amount of net assets owned by the shareholders (investors) at a certain date.

2.1.2 *Income statement*

Income statement (Profit and loss statement) reflects the operating results and distribution of a company in a certain accounting period. It is the financial record of the company's operating performance over a period of time, which reflects the sales income, the

cost of sales and taxes. The results of the report reflect whether the company achieves the profits or losses. Therefore, income statement is a dynamic report. Now, let us understand the process of income statement step by step. First, the difference between sales and cost of goods sold is gross profit. Then, deducting administrative and general costs from gross profit is earnings before interests and taxes or operating income. Third, the difference between operating income and interest costs, taxes is net income. In the end, the company can distribute the net income to their shareholders, if there are residual net income, the company can make reinvestment.

We can see the structure of income statement in the following image.

Image 2.2 The structure of income statement

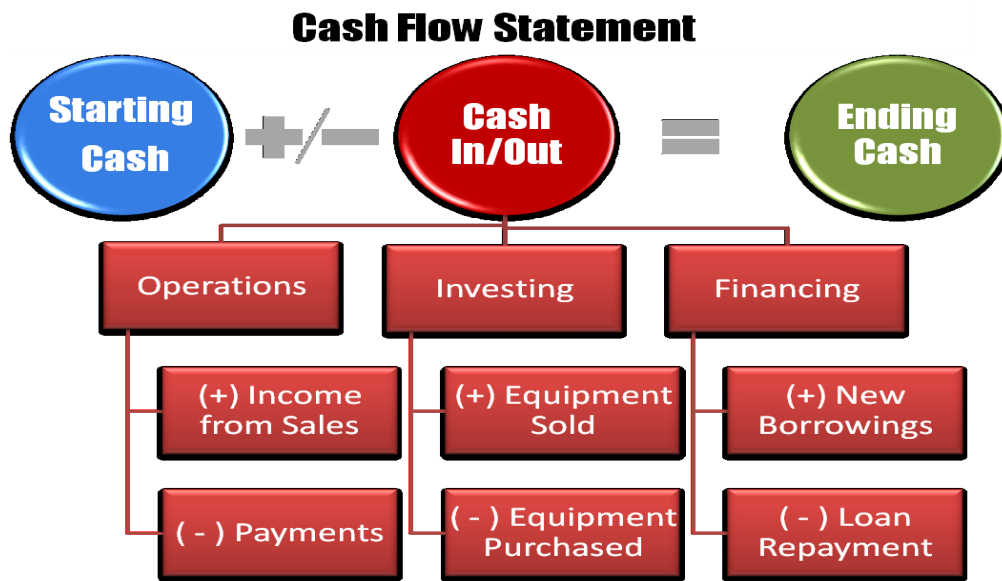


Source:<http://www.creditmanagement-tools.com/analyze-the-profit-and-loss-account-cl-r12.php>.

2.1.3 Cash flow statement

The cash flow statement is one of the three basic reports of the financial statements. We can see the composition of cash flow statement in image 2.3.

Image 2.3 The composition of cash flow statement



Source: <http://www.builder-resources.com/Survive.html>

As the image 2.3 shows, we can see the formulas of cash flow statement:

$$\text{Net cash flow} = \text{sum of inflow} - \text{sum of outflow} \quad (2.2)$$

$$\text{Cash at the end} = \text{cash at the beginning} + (-) \text{net cash flow} \quad (2.3)$$

Cash flow statement can reflect the impact of the various items on the cash flow in the balance sheet and is classified into three categories: operating, investing and financing activities. Cash inflows include sales of goods and services, collection of receivable. Cash outflows include payments for inventory, salary and wages payments, taxes, paying payable and so on. As an analytical tool, the main role of the cash flow statement is to determine the company's

short-term viability. Also, the cash flow statement provides the evidence whether a company is operating healthily.

Cash flow from operating activities begins with net income, then plus the change in current assets, change in current liabilities and depreciation. Cash flow from investing activities includes sale of plant and equipment, purchase of plant and equipment. Cash flow from financing activities involves repurchase of common stock and dividends on common stock.

2.2 Common-size analysis

Common-size analysis is one of the most important analysis methodology in financial statement. It includes vertical common-size analysis and horizontal common-size analysis.

2.2.1 *Horizontal common-size analysis*

Horizontal common-size analysis also called trend analysis, it helps to identify trends and major differences of selected data over a certain period. Generally, the earliest period is usually used to be the base period. Changes in trend can be determined as absolute or relative (percentage change).

$$\text{Absolute change} = a_1 - a_0 \quad (2.4)$$

$$\text{Relative change} = \frac{a_1 - a_0}{a_0} \quad (2.5)$$

Where a_0 is the amount of the item in the base year, a_1 is the amount of the item in the comparison year.

2.2.2 Vertical common-size analysis

Vertical common-size analysis also called structure analysis, it examines the proportion of selected components relative to a selected benchmark. The generalized formula is:

$$\text{Proportion} = \frac{\text{Amount of the item}}{\text{Amount of the benchmark}} \quad (2.6)$$

In the balance sheet, total assets or total equity and liability are the benchmark (100%), so long-term assets and current assets can be the amount of the item. In the income statement, total revenues are the benchmark, so total expenses, earnings before taxes, net income and so on can be the amount of the item. Furthermore, the combination of vertical common-size analysis and horizontal common-size analysis can provide the horizontal-vertical analysis.

2.3 Financial ratios analysis

Financial ratios analysis can be used to assess the change of earnings in an investment over the years, or to compare the different firms in a given industry at a given time. Financial ratio analysis can be used to compare the benefits and risks of different enterprises, so as to help investors and creditors to make informed decisions.

As we all know, there are different kinds of financial ratios: profitability ratios, liquidity ratios, solvency ratios and asset management ratios.

2.3.1 Profitability ratios

Profitability ratios measure the ability to generate profit from invested capital during a period. In general, the company's profitability refers to the normal business situation. Abnormal business conditions can also bring benefits or losses to the company, but this is only a special case, it can not explain the company's ability. Therefore, when securities analysts analyze the

company's profitability, they should exclude the following factors: securities trading and other non-permanent items, major accidents or legal changes and so on.

Gross profit margin (GPM): It is the ratio of gross profit to sales revenue (or operating income), where gross profit is the difference between revenue and operating costs corresponding to income.

The formula is:

$$GPM = \frac{\text{Gross profit}}{\text{Total revenues}} \quad (2.7)$$

Gross profit margin is the initial basis of net profit margin, if there is not enough sales gross margin, it can not be profitable. Moreover, it is influenced by research and development costs. New products have great advantages in the cost and efficiency, so it has great gross margin.

Operating profit margin (OPM): It refers to the ratio of operating profit and operating income of an enterprise. It is an indicator to measure the business efficiency, reflecting the ability of business managers to obtain profits in case of the consideration of operating costs.

The formula is:

$$OPM = \frac{EBIT}{\text{Total revenues}} \quad (2.8)$$

From the formula, we can see that the higher the operating profit margin, the more the operating profit provided by the sales of goods, and the stronger the profitability of the enterprise. On the contrary, the lower the ratio, the weaker the profitability of the enterprise.

Net profit margin (NPM): It refers to the contrast relationship of the enterprise to achieve net profit and sales revenue, measuring the ability of the company to obtain sales revenue during a certain period.

The formula is:

$$NPM = \frac{EAT}{Total\ revenues} \quad (2.9)$$

Net profit margin can also be understood as an indirect performance of the firm's competitiveness. It can be compared with the gross margin, the closer of them, the lower the fees of the business. Thus, if there are no more management fees, it proves that the firm is efficient. If there are no more management fees, it proves that the firm has more markets. If there are no more management fees, it proves that the firm has lower level of debts.

Return on assets (ROA): It measures the return earned by a company on its assets, it also can be interpreted as the ratio of corporate profits to the average asset of the firm.

The formulas are:

$$ROA = \frac{EBIT}{A} \quad (2.10)$$

$$ROA = \frac{EAT}{A} \quad (2.11)$$

The higher ROA, the higher efficiency of the use of assets, the more profits can be created by using assets, the stronger profitability of the company, the higher level of business management. On the contrary, it has the opposite result.

Return on equity (ROE): It refers to the ratio of net profit after tax to equity investment.

In general, capital-intensive industries have higher barriers to entry and less competition, on the contrary, high-ROE but low-asset industries are more likely to enter and face greater competition. So ROE should be used in the same industry.

The formula is:

$$ROE = \frac{EAT}{E} \quad (2.12)$$

In reality, Buffett prefers to use the ROE to measure the profitability of a company.

According to his investment principle, the company's ROE should not be less than 15%.

2.3.2 Solvency ratios

Solvency ratios measure the company's ability to fulfil its long-term obligations.

A company's solvency ratio should also be compared with its competitors in the same industry rather than viewed in isolation. For example, companies in debt-heavy industries may have lower solvency ratios than those in sectors such as technology.

Debt ratio: It is the percentage of total liabilities divided by the total amount of assets, which is reflected in the proportion of total assets is raised through borrowing, but also can measure the degree of protection of creditors when the enterprise has liquidation.

The formula is:

$$Debt\ ratio = \frac{Total\ debts}{Total\ assets} \quad (2.13)$$

Creditors believe that the lower debt ratio, the better for them, because the more creditor protection, the smaller the risk of loans. From the point of view of operator, the debt ratio is too

high, companies can not continue to raise funds, debt ratio is too low, it indicates that business operations lack of energy. Therefore, from the perspective of financial management, companies should determine a reasonable capital structure.

Debt-to-equity ratio: It is the ratio between the firm's liability and the owner's equity (shareholder's equity), also known as the ratio of property rights.

The formula is:

$$\text{Debt to equity ratio} = \frac{\text{Total debts}}{\text{Total equity}} \quad (2.14)$$

Generally speaking, the high debt-to-equity ratio is a high-risk, high-paying financial structure, while low debt-to-equity ratio is a low-risk, low-paying financial structure. From shareholders, during the boom period, leverage can get extra profits, in the period of economic contraction, less borrowing can reduce the interest burden and financial risk.

Interest coverage: It is also known as interest coverage multiple, which is an indicator to measure whether the company's pre-tax profits can pay the current interests.

The formula is:

$$\text{Interest coverage} = \frac{\text{EBIT}}{\text{Interest paid}} \quad (2.15)$$

Interest coverage is essentially a risk indicator, especially when the company is experiencing a low period of performance. It can explain whether the company has the ability to pay interest to avoid debt risk and whether there is financing Ability to reverse the dilemma. Obviously, if interest coverage less than 1, it indicates that the company's profits even can't pay bank interest. In fact, if interest coverage less than 2.5, it is necessary to be vigilant for investors.

2.3.3 *Liquidity ratios*

Liquidity ratios measure a company's ability to satisfy its short-term obligations, which compares liquid assets and short-term obligations.

Current ratio: It is the ratio of the total current assets to the total current liabilities, which is used to measure the ability of converting a company's current assets into the cash for debt repayment in the short term debt before maturity.

The formula is:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} \quad (2.16)$$

Quick ratio: It is the ratio of quick assets to current liabilities, which is used to measure the company's current assets can be converted into cash immediately to repay the ability of current liabilities.

The formula is:

$$\text{Quick ratio} = \frac{\text{Current assets} - \text{inventories}}{\text{Current liabilities}} \quad (2.17)$$

$$\text{Quick ratio} = \frac{\text{Cash} + \text{accounts receivable}}{\text{Current liabilities}} \quad (2.18)$$

Cash ratio: It refers to the ratio of company's cash to current liabilities, which reflects the company's immediate ability of liquidity. The cash includes cash and cash equivalents.

The formula is:

$$\text{Cash ratio} = \frac{\text{Cash} + \text{marketable securities}}{\text{Current liabilities}} \quad (2.19)$$

2.3.4 Activity ratios

Activity ratios can be used to evaluate the efficiency of a company operating its assets. In general, activity ratios include inventory turnover ratio, accounts receivable turnover ratio, average receivable collection period, current assets turnover ratio and total asset turnover ratio. Here we mainly discuss the four activity ratios: inventory turnover, total asset turnover, accounts receivable turnover and average collection period.

Inventory turnover: It is the ratio of the cost of the main business to the average inventory during a certain period. Inventory turnover is used to reflect whether the liquidity of inventory and the funds of inventory is reasonable. Thus, it can improve the efficiency of the funds and enhance the short-term solvency of the company while ensuring the continuity of operation.

The formula is:

$$\text{Inventory turnover} = \frac{\text{Costs of goods sold}}{\text{Average inventory}} \quad (2.20)$$

If the inventory turnover ratio is higher, which indicates that the level of inventory's occupation is lower and the liquidity stronger. On the other hand, the lower the inventory turnover ratio, the more funds occupied.

Total assets turnover: It is the ratio of the sales income to the total assets of the company during a certain period.

The formula is:

$$\text{Total assets turnover} = \frac{\text{Revenues}}{\text{Total assets}} \quad (2.21)$$

If the total assets turnover is higher, it reflects that sales capacity is stronger. Company can accelerate the turnover of assets through the small profits but quick turnover approach.

Accounts receivable turnover: Accounts receivable turnover is also known as the collection ratio, which is an indicator to measure the degree of corporate accounts receivable flow. It is the ratio of the total revenue to accounts receivable.

The formula is:

$$\text{Accounts receivable turnover} = \frac{\text{Revenues}}{\text{Accounts receivable}} \quad (2.22)$$

In general, the higher accounts receivable turnover, the shorter the average collection period, the faster the collection of accounts receivable. Otherwise, the company's working capital will pay more attention to the accounts receivable, which affects the normal cash flow.

Average collection period: It refers to the recovery rate of accounts receivable in current assets, which is the supplementary index of accounts receivable turnover.

The formula is:

$$\text{Average collection period} = \frac{\text{Accounts receivable}}{\text{Revenues}} \cdot 360 \quad (2.23)$$

The average balance of accounts receivable shall be (beginning balance + final balance) divided by two. If the average collection period is shorter, the ability to convert into money of receivables is stronger. If the actual payback period exceeds the stipulated repayment period by the company, it shows that the operation of funds is not efficient.

2.4 DuPont analysis

It uses the relationship between several major financial ratios to analyze the financial situation of companies, this method was first used by the United States DuPont company, named DuPont analysis.

Let us take ROA for instance. We know ROA has two functions, first, ROA can be broken down into:

$$ROA = \frac{EBIT}{Revenues} \cdot \frac{Revenues}{Total\ assets} \quad (2.24)$$

This shows that ROA has relationship with operating profit margin and total assets turnover. Thus, if we want to analyze the change of ROA, we can get information from operating profit margin and total assets turnover.

Then, ROA also can be divided into:

$$ROA = \frac{EAT}{Revenues} \cdot \frac{Revenues}{Total\ assets} \quad (2.25)$$

This is equal to:

$$ROA = Net\ profit\ margin \cdot Total\ assets\ turnover \quad (2.26)$$

Next, we continue to make decomposition of EAT

$$EAT = EBIT \cdot \frac{EBT}{EBIT} \cdot (1 - Tax\ rate) \quad (2.27)$$

As we know, the ratio between EBT and EBIT is the interest burden of a company, (1 - Tax rate) is the tax burden of a company. Thus, we can finally get the decomposition of ROA:

$$ROA = \frac{EBIT}{Revenues} \cdot \frac{Revenues}{Total\ assets} \cdot \frac{EBT}{EBIT} \cdot (1 - \text{Tax rate}) \quad (2.28)$$

For the same reason,

$$ROE = \frac{EAT}{Revenues} \cdot \frac{Revenues}{Total\ assets} \cdot \frac{Total\ assets}{Equity} \quad (2.29)$$

This is equal to:

$$ROE = \frac{EBIT}{Revenues} \cdot \frac{Revenues}{Total\ assets} \cdot \frac{EBT}{EBIT} \cdot (1 - \text{Tax rate}) \cdot \frac{Total\ assets}{Equity} \quad (2.30)$$

In a word, the DuPont analysis is good way to make analysis for a company, because we can use not only the data from balance sheet, but also the data from income statement. We can better to understand the factors about what we need to analyze due to the DuPont analysis.

2.4.1 Influence quantification

It measures how the component ratios contribute to the change in basic ratio. The basic ratio is the ratio that you want to analyze. The quantification of influences is identical for all methods and the decomposition of the total increment is based on the ratio of the partial indicator's increment relative to the total increment. Therefore, the formula is as follow:

$$\Delta X_{a_i} = \frac{\Delta a_i}{\sum_i \Delta a_i} \cdot \Delta y_x \quad (2.31)$$

We need to know $a_{i,0}$ and $a_{i,1}$ represent the values of the i -th indicator for the basic period and the comparison period:

$$\Delta a_i = a_{i,1} - a_{i,0} \quad (2.32)$$

2.4.2 Method of gradual changes

Based on (2.30), we can get the n -th component formula:

$$\begin{aligned}
 \Delta X_{a_1} &= \Delta a_1 \cdot a_{2,0} \cdot a_{3,0} \cdot \dots \cdot a_{n,0} \cdot \frac{\Delta y_x}{\Delta x} \\
 \Delta X_{a_2} &= a_{1,1} \cdot \Delta a_2 \cdot a_{3,0} \cdot \dots \cdot a_{n,0} \cdot \frac{\Delta y_x}{\Delta x} \\
 &\vdots \\
 \Delta X_{a_n} &= a_{1,1} \cdot a_{2,1} \cdot a_{3,1} \cdot \dots \cdot \Delta a_n \cdot \frac{\Delta y_x}{\Delta x} \\
 \Delta X_{a_i} &= \Delta a_j \cdot \prod_{j \leq i} a_{j,0} \cdot \prod_{j \geq i} a_{j,1} \cdot \frac{\Delta y_x}{\Delta x}
 \end{aligned} \tag{2.33}$$

We can use the formula (2.32) to judge how component ratios have influence on the basic ratio.

2.4.3 Logarithmic decomposition method

Logarithmic decomposition method needs use this function:

$$\Delta y_x = \sum_i \Delta x_{a_i} \tag{2.34}$$

In order to get better understand the components, firstly, we need to make decomposition of I_x .

$$I_x = \frac{x_1}{x_0} = \frac{a_{1,1}}{a_{1,0}} \cdot \frac{a_{2,1}}{a_{2,0}} \cdot \dots \cdot \frac{a_{n,1}}{a_{n,0}} = I_{a_1} \cdot I_{a_2} \cdot \dots \cdot I_{a_n} = \prod_i I_{a,i} \tag{2.35}$$

This also shows:

$$I_x^{(\sum \Delta X_{a_i} \div \Delta y_x)} = \prod_i I_{a_i} \tag{2.36}$$

Next, we continue to make logarithmic calculation:

$$\left(\sum \Delta X_{a_i} / \Delta y_x\right) \cdot \ln I_x = \sum \ln I_{a_i} \quad (2.37)$$

In the end, it can be this formula:

$$\Delta X_{a_i} = \frac{\ln I_{a_i}}{\ln I_x} \cdot \Delta y_x \quad (2.38)$$

3 Basic Characteristics of the Company

In this chapter, we will introduce the history, the products and services, management advantages, strengths and weaknesses of Ctrip.

3.1 History

Ctrip is an online ticketing service company, which was founded in 1999 and headquartered in Shanghai, China. Ctrip has more than 60,000 members at home and abroad for hotel reservations, and it is China's leading hotel reservation service center. Ctrip has set up branch offices in 17 cities including Beijing, Guangzhou, Shenzhen, Chengdu, Hangzhou, Xiamen, Qingdao, Shenyang, Nanjing, Wuhan, Nantong and Sanya with over 25,000 employees.

Here are the brief histories about the Ctrip.

In October 1999, Ctrip was set up. In March 2002, acquired Beijing Coast Air Service Co., Ltd. In October 2002, monthly turnover exceeded 100 million yuan for the first time. In October 2003, ticket reservation network covering 35 cities in China. In December 2003, opened in the United States Nasdaq listing of the city is the highest increase in the day record over past three years. In September 2004 and China Merchants Bank jointly launched the first dual currency travel credit card In October 2004, launched a new 360 ° holiday supermarket, the most important concept of leisure tourism. In November 2004, announced dividends to become the United States of America's first dividend of the Chinese Internet stocks. In December 2004, to spend 20 million US dollars to build a modern online travel technology service center. In March 2006, into the business management market. In June 2006, set up Ctrip

Sunshine scholarship in the 14 universities. In May 2007, launched the first domestic business elite credit card - Bank of China Ctrip card. In June 2007, Ctrip Network Technology Building officially completed and put into use. In June 2007, the Service 2.0 Seminar was held. In November 2007, single-month ticket sales exceeded one million. In January 2008, Ctrip Travel Network created Ctrip Global DIY. In March 2008, Ctrip launched a new online site in English. In May 2008, Ctrip vacation experience center landed on major airports. In July 2008, Premier Wen Jiabao visited to Ctrip headquarters in Shanghai. In December 2008, the CPC Central Committee Political Bureau Standing Committee, Vice Premier Li Keqiang to Ctrip inspection work. In December 2008, Ctrip Nantong call service center was officially launched. In January 2009, Ctrip released the first corporate citizenship report. In May 2010, officially completed with more than 12,000 call seats of Ctrip Information Technology Building in Nantong, Jiangsu Economic and Technological Development Zone. In January 2011, signed a cooperation agreement with Shanghai well-known restaurant reservation service provider "ordering small secretary" in Shanghai officially. In September 2014, Ctrip invested 500 million yuan joint CITIC Industrial Fund strategic investment Huayuan International Travel Service. In October 2015, Ctrip was combined with Qunar, after that, Ctrip would have 45% of the shares of Qunar. In October 2015, Ctrip announced a deal with Baidu to reach an equity swap. According to the transaction. After the completion of the transaction, Baidu would have Ctrip common stock which represented about 25% of Ctrip's total voting rights, Ctrip would have about 45% of the total voting right of Qunar.

3.2 Products and services

In this part, we will introduce the products and services of Ctrip, for example, hotel reservations, ticket reservations, holiday reservations, credit cards and gift card.

3.2.1 *Hotel reservations*

Ctrip has a leading hotel reservation service center in China, providing instant booking service for members. Also, Ctrip has more than 28,000 cooperative hotels, more than 5900 cities in 134 countries and regions around the world. Not only for members to provide preferential price reservations, but also has a large number of reservations in the main hotel room. To provide more protection for members' travelling.

Ctrip took the lead in the industry to launch commitment of low-cost hotel compensation, which ensures that guests can stay at the hotel at preferential prices. Ctrip promises: If members booking through Ctrip and stay at the hotel, while the member price is higher than the hotel front desk price at the same day, Ctrip will have compensation for price difference after checking.

3.2.2 *Ticket reservations*

Ctrip has a nationwide network of ticket booking, distribution and major airport on-site service system for members to provide international and domestic air ticket booking service. At present, Ctrip's ticket booking has covered major domestic and international airline routes and flights, also Ctrip has achieved ticket delivery service in 54 cities and "local reservations, remote delivery".

Ctrip is the first to launch one-hour trapeze channel in the field of air ticket booking to ensure that guests can book tickets and boarding successfully in a shorter period of time.

3.2.3 *Holiday reservations*

Ctrip provides free exercise, overseas team tours, semi-self-help travel, driving, visa, free PASS, on behalf of driving a car rental and other holiday products for members. Among that, the free exercise is based on adequate resources to provide a wide range of hotels, flights, ships, trains, buses and other services with perfect supports, Ctrip has become the leader about the free exercise in the industry now. At present, Ctrip has opened up more than 10 starting cities, owning more than a thousand vacation lines, covering more than 200 resorts at home and abroad, the number of people go to trips monthly is nearly 50,000 people.

3.2.4 *Ctrip credit cards*

We can see some main features of Ctrip credit cards.

A. Golden ear Ctrip travel credit card, it is also Ctrip VIP membership card. Consumption in Ctrip can not only accumulate Ctrip points, but also can accumulate credit card points.

B. You can enjoy the four exclusive accounts: "financial account, bank points, Ctrip points, travel reserve" by using the Golden ear Ctrip travel credit card,

C. Holding Golden Dragon Ctrip travel credit card, you can book more than 28,000 hotels about 134 countries in the world.

D. Holding Golden ear Ctrip travel credit card, you can achieve the information query of domestic and international air tickets.

3.2.5 Ctrip gift cards

Ctrip launched prepaid card products code-named "tickets" in 2011, and gradually deepen the user experience and optimize the scope of payment, officially named "Ctrip gift cards." in 2013. It has two types of products now: "My travel", and "Garmin".

We can see how we can use these products.

A. “My travel” can book prepaid hotels, benefit election hotels, air tickets, vacation products, train tickets, buy products.

B. “Garmin” can book pre-paid hotels, benefit election hotels, vacation products, buy products.

3.3 Management advantages

In this part, we focus on the management advantages of Ctrip, they include economies of scale, advanced technology and standardized system.

3.3.1 Economies of scale

Scale of service and scale of resource is one of the core strengths of Ctrip. Ctrip has leading call center in Asia's travel industries, the number of seats is nearly 4,000. Ctrip has established long-term and stable cooperative relationships with more than 28,000 hotels in 134 countries and regions. The airline's reservation network covers most of the international and domestic routes, and its ticket delivery network covers 54 major cities in China. Scale of operations can not only provide members with more superior travel options, but also protect the standardization of services and reduce operating costs.

3.3.2 *Advanced technology*

Ctrip always regards technology as the source of the enterprise vitality, so it can enhance research capabilities easily. Ctrip has established a complete system of modern service, which includes: customer management system, room volume management system, call queuing system, order processing system, E-Booking ticket booking system, service quality monitoring system. Relying on these advanced services and management systems, Ctrip provides members with more convenient and efficient service.

3.3.3 *Standardized system*

Advanced management and controlling system is another core advantage of Ctrip. Ctrip has divided the service process into multiple segments to control different links, and established a set of evaluation system. At present, the various service indicators of Ctrip are close to the international leading level, moreover, the service quality and satisfaction of customer also have been enhanced.

3.4 Strengths and weaknesses

Compared with its competitors, the biggest advantage of Ctrip is reflected in the financial resources. Ctrip successfully listed on the Nasdaq in 2003, and became the first listed online travel company in China. The listed of Ctrip raised enough funds for itself, which laid the foundation in the development of Chinese market.

The largest competitive disadvantage of Ctrip is its high cost. As we all know, Ctrip was founded in 1999, while China's Internet was far away from today. In order to meet market demand, Ctrip has set up a different business model relative to the online travel booking in

developed country, which is a huge call center based on the network booking. As the call center for non-consumer independent completion of the booking model, so this process need more persons to support to achieve a successful booking for consumers. Therefore, each ticket or hotel room is sold, the costs are more than competitors in the market. The revenues minus costs is profit, so the high cost of Ctrip is a serious impact on its profitability, which is becoming its largest disadvantage in development.

From a technical point of view, with the development of 3G \ 4G network and the popularity of smart phones, people rely on the mobile side to order tourism products increasingly. Tourism products is a very suitable for online sales and consumers can booking products easily through the mobile, which greatly improves the convenience. In this opportunity, Ctrip released Ctrip wireless, Ctrip special hotels, donkey network, iron and other wireless applications to provide a seamless travel experience for mobile consumers.

In the price-sensitive era, the first consideration for consumers to buy a product is still the price. In an industry, the more competitive companies, the lower the price of the product. Many OTA companies into the online travel market, homogenization of competition to make it at low prices to improve product appeal, any one of the unknown online travel companies have the possibility of being exposed. Ctrip has high costs so that it can't be lower with each OTA at every product price, if the price once higher than other competitors, Ctrip will lose part of the customers.

4 *Evaluation of Financial Situation of the Company*

In this chapter, we make evaluation of financial situation of the company by the help of the methods, which were defined in the theoretical part. We use data of financial statements for period 2011 – 2015. Firstly, we make common-size analysis, which will be divided into vertical and horizontal analysis. After that financial ratios analysis will be calculated. Finally, the influence quantification of Return on Equity will be made.

4.1 Common-size analysis of Ctrip

Before we make the common-size analysis of Ctrip, we need use the balance sheet and income statement of Ctrip from 2011-2015. Then we can see the simplified balance sheet in Tab. 4.1 and the simplified income statement in the Tab. 4.2.

Tab. 4.1 Simplified balance sheet (millions of CNY)

Components	2011	2012	2013	2014	2015
Current assets	6398	7644	14365	17077	40601
Long-term assets	3363	4026	6453	14133	78242
Total assets	9761	11670	20818	31210	118843
Equity	7145	6585	8730	10378	63685
Long-term liabilities	48	1175	5720	8117	21492
Current liabilities	2568	3910	6368	12715	33666
Total liabilities	2616	5085	12088	20832	55158
Total liabilities and equity	9761	11670	20818	31210	118843

Tab. 4.1 summarizes the assets, equity and liabilities components of Ctrip from 2011 to 2015. As we know, equity plus liabilities equals to total assets, the data proves this function. Moreover, we can clearly see the financial situation of Ctrip.

Tab. 4.2 Simplified income statement of Ctrip (millions of CNY)

Components	2011	2012	2013	2014	2015
Revenues	3498	4159	5387	7347	10897
Cost of revenues	805	1038	1387	2101	3043
Gross profit	2693	3121	4000	5246	7854
Total operating expenses	1627	2466	3162	5397	7473
Operating income	1066	655	838	-151	381
Net interest income and other income	281	331	362	373	2489
EBT	1347	986	1200	222	2870
Income taxes	262	295	294	131	470
EAT	1085	691	906	91	2400

From Tab. 4.2 we can see the revenues, income before tax and net income from 2011 to 2015. And we can clearly see that the revenues have been increasing during the five years, but the net income fluctuated.

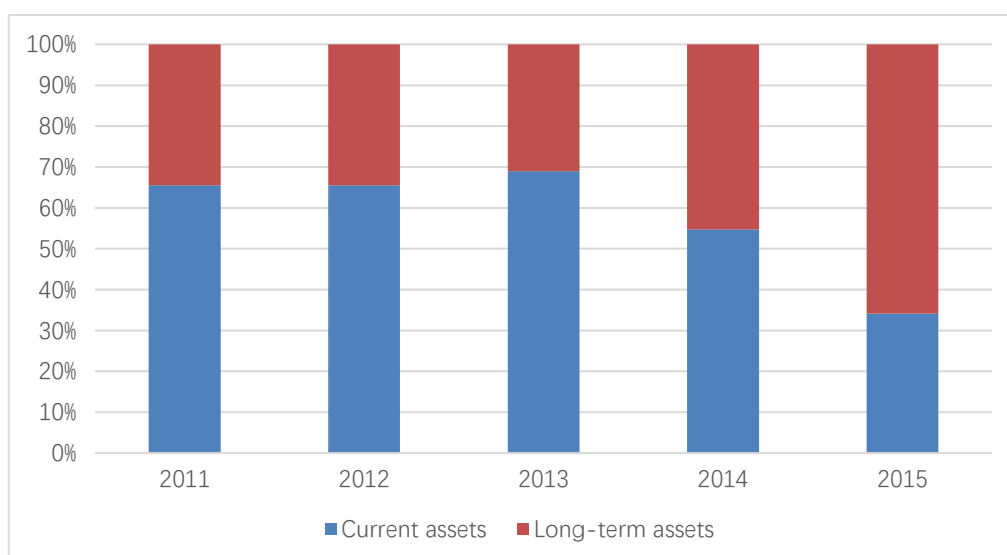
4.1.1 Vertical common-size analysis of Ctrip

In this section, we focus on the vertical common-size analysis of Ctrip. It mainly analyzes the trend structure of the statement. Then, it shows the proportion of each item in total assets from 2011 to 2015. We can see the Tab. 4.3 and Chart.4.1. And the calculation is based on (2.6).

Tab. 4.3 The proportion of each item in total assets (%)

Components	2011	2012	2013	2014	2015
Long-term assets	34.45	34.50	31	45.28	65.84
Current assets	65.55	65.50	69.00	54.72	34.16
Cash and cash equivalents	35.89	29.32	34.29	16.98	16.17
Restricted cash	2.17	6.58	3.55	2.68	1.92
Short-term investments	13.20	12.07	17.46	20.63	6.93
Accounts receivable	8.08	8.43	7.29	5.85	2.65
Due from related parties	0.05	0.05	0.10	0.03	0.81
Prepayments and other current assets	5.75	8.52	5.84	7.91	5.68
Deferred tax assets, current	0.41	0.53	0.47	0.64	0
Total assets	100	100	100	100	100

Chart 4.1 Vertical common-size analysis of assets.



In Tab. 4.3, we can easily see that during the five years, the cash and cash equivalent decreased from 35.89% to 16.17%, at the same, accounts receivables decreased from 8.08% to

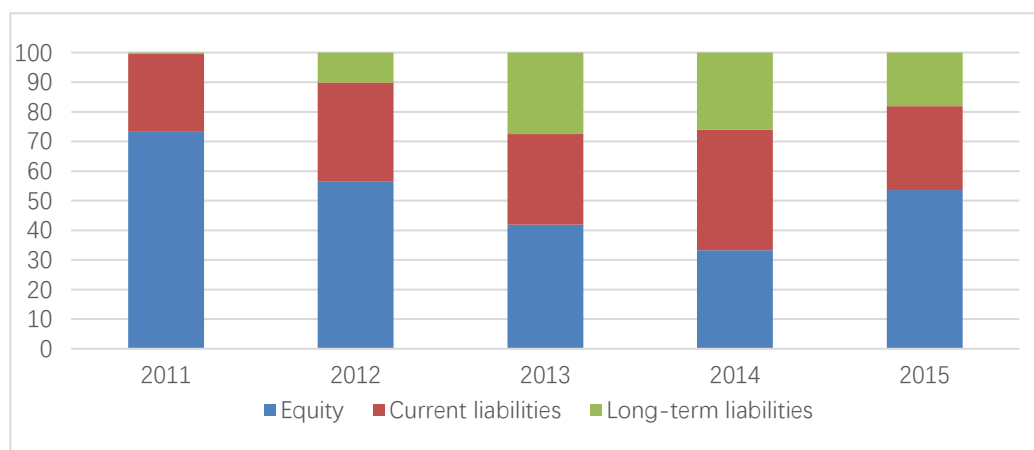
2.65%. In addition, before 2015, long-term assets were always behind of short-term assets, on the contrary, in 2015, it was the first time for long-term assets to surpass short-term assets. The reason is that on May 2015, Ctrip invested in Art Dragon for 400 million US dollars as its largest shareholder, on October 2015, Ctrip had 45% of Voting rights for Qunar. Moreover, restricted cash represented cash that cannot be withdrawn without the permission of third parties. The Group's restricted cash is substantially cash balance on deposit required by its business partners and commercial banks.

Next, we need make vertical common-size analysis of each item in total equity and liabilities from 2011 to 2015. We can see the Tab. 4.4 and Chart.4.2.

Tab.4.4 The proportion of each item in total equity and liabilities (%)

Components	2011	2012	2013	2014	2015
Equity	73.20	56.43	41.93	33.25	53.59
Long-term liabilities	0.50	10.07	27.48	26.01	18.08
Current liabilities	26.30	33.50	30.59	40.74	28.33
Total liabilities	26.80	43.57	58.07	66.75	46.41
Total liabilities and equity	100	100	100	100	100

Chart 4.2 Vertical common-size analysis of equity and liabilities (%)



From the Tab. 4.4 and chart 4.2, we can see the equity decreased from 73.20% to 33.25% from 2011 to 2014 and increased from 33.25% to 53.59%. The reason of decreasing is that investors were not confident with Ctrip during the period. But, Ctrip has finished the merger and acquisition for some companies in 2015, so the equity would increase. Long-term liabilities and current liabilities had little float up or down from 2011 to 2015. We can see total liabilities were more twice than the equity, this means that the most financing way of Ctrip is from debts.

4.1.2 Horizontal common-size analysis of Ctrip

In this section, we will focus on the horizontal common-size analysis of Ctrip. It is mainly trend analysis. It is well-known that absolute change of each item of balance sheet is calculated based on (2.4).

Then, we will compare items between each two years. We can see the next table.

Tab.4.5 Absolute change of each item in balance sheet (in millions of CNY)

Components	2011/2012	2012/2013	2013/2014	2014/2015
Long-term assets	663	2427	7680	64109
Current assets	1246	6721	2712	23524
Total assets	1909	9148	10392	87633
Equity	-560	2145	1648	53307
Liabilities	2469	7003	8744	34326
Total liabilities and equity	1909	9148	10392	87633

As we know, relative change of each item of balance sheet is calculated based on (2.5).

As the same as absolute change of balance sheet, we compare them between each two years.

Tab.4.6 Relative change of each item in balance sheet (%)

Components	2011/2012	2012/2013	2013/2014	2014/2015
Long-term assets	19.71	60.28	119.01	453.61
Current assets	19.47	87.93	18.88	137.75
Total assets	19.56	78.39	49.92	280.79
Equity	-7.84	32.57	18.88	513.65
Liabilities	94.38	137.72	72.34	164.78
Total liabilities and equity	19.56	78.39	49.92	280.79

In Tab. 4.5 and Tab. 4.6, the long-term assets increased fastest during the period, it was caused by the investments in subsidiaries and associated companies, such as Art Dragon, Qunar and so on. The biggest absolute change is RMB 64109 millions of long-term assets in 2015, and the biggest relative change is 513.65% of equity in 2015. Because Ctrip gained more shareholders, it is no surprise that equity can be so big in 2015.

But beyond that, the liabilities also increased quickly, it grew 164.78% between 2014 and 2015. That is because Ctrip borrowed more money to develop new technology for different customers.

Horizontal common-size analysis is also used in income statement. The absolute change and relative change are showed in Tab. 4.7 and Tab. 4.8.

Tab. 4.7 Absolute change of income statement (in millions of CNY)

Components	2011/2012	2012/2013	2013/2014	2014/2015
Revenues	661	1228	1960	3550
Cost of revenues	233	349	714	942
Gross profit	428	879	1246	2608
Operating expenses	839	696	2235	2076
Operating income	-411	183	-989	532
Net interest income and other income	50	31	11	2116
EBT	-361	214	-978	2648
Income taxes	33	1	163	339
EAT	-394	215	-815	2309

Tab. 4.8 Relative change of each item of income statement (%)

Components	2011/2012	2012/2013	2013/2014	2014/2015
Revenues	19.90	29.53	36.38	32.58
Cost of revenues	28.94	33.62	51.48	44.84
Gross profit	15.89	28.16	31.15	49.71
Operating expenses	51.57	28.22	70.68	38.47
Operating income	-38.56	27.94	-118.02	-352.32
Net interest income and other income	17.79	9.37	3.04	567.29
EBT	-26.80	21.70	-81.50	1192.79
Income taxes	12.60	-0.34	-55.44	258.78
EAT	-36.31	31.11	-89.96	2537.36

In Tab. 4.7 and Tab. 4.8, the sales had always been increasing from 2011 to 2015. We can see the biggest absolute change is RMB 3550 millions in 2015 and biggest relative change is 36.38% in 2014. There are some reasons for explaining the phenomenon. First of all, revenues from accommodation reservation business increased by 44% from RMB3.2 billion in 2014 to

RMB4.6 billion in 2015, primarily driven by an increase of 50% in hotel room nights sold. Secondly, revenues from transportation ticketing business increased by 51% from RMB3.0 billion in 2014 to RMB4.5 billion in 2015, primarily due to the strong growth of our air tickets and railway tickets sales volume.

Moreover, Corporate travel revenues increased by 27% from RMB373 million in 2014 to RMB473 million in 2015, primarily due to the increased corporate travel demand from our corporate clients.

Then we can see the income taxes, income tax expense was RMB470 million in 2015, an increase of 258.78% over RMB131 million in 2014, primarily due to the increase in our taxable income. Our effective income tax rate in 2015 was 16%, as compared to 97% in 2014. It is mainly due to the Company recognized a significant valuation allowance against certain deferred tax assets in 2014, due to increase in tax losses generated from certain subsidiaries that are not expected to be recovered.

4.2 Financial ratios analysis

The methods of financial ratios analysis have been introduced in chapter 2. Now, we need apply these ratios by using the relevant data to analyze Ctrip.

4.2.1 Profitability ratio

In this part, firstly, we need some effective data to calculate the profitability ratio. Then, we can analyze what we have get from the profitability ratio, and decide whether it has benefits to the Ctrip. Specifically, Tab. 4.9 shows the data.

Tab.4.9 Data used to calculate profitability ratios (in millions of CNY)

Year	2011	2012	2013	2014	2015
Revenues	3498	4159	5387	7347	10897
Gross profit	2693	3121	4000	5246	7854
EBIT	1066	655	838	-151	381
EAT	1085	691	906	91	2400
Total assets	9761	11670	20818	31210	118843
Equity	7145	6585	8730	10378	63685

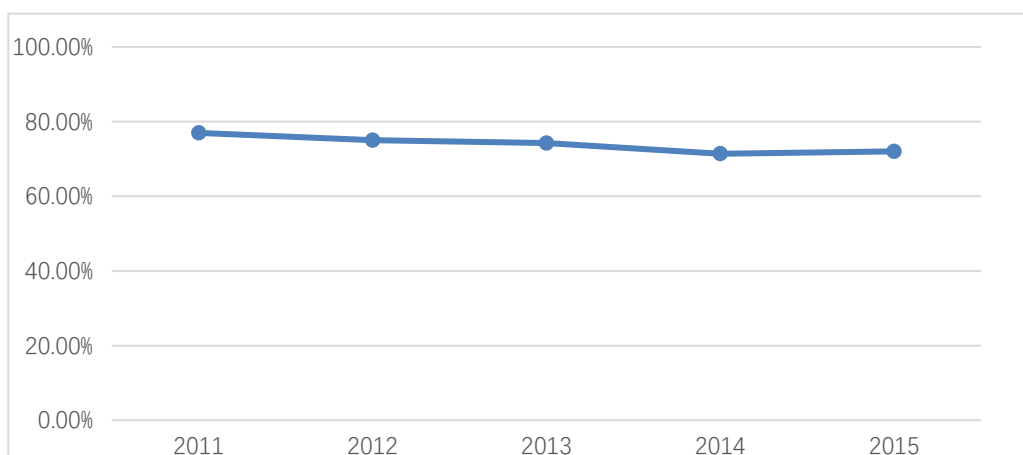
1) Gross profit margin

We know gross margin has impact on operating profit margin, and it is calculated based on (2.7)

Tab. 4.10 Gross profit margin

Year	2011	2012	2013	2014	2015
Gross profit margin	76.99%	75.04%	74.25%	71.40%	72.07%

Chart.4.3 Gross profit margin



From the Tab.4.10 and Chart.4.3, we can see that the gross profit margin is more than 70% for the five years. It means that Ctrip has a great operating situation at the period. But, in 2014, the gross profit margin was the lowest, this due to an increase in credit card service fee payable to third-party payment settlement channels such as UnionPay and the number of customer service personnel. This increase was primarily attributable to increased costs associated with the expansion of our accommodation reservation business and the rapid growth of packaged-tour businesses and ticketing.

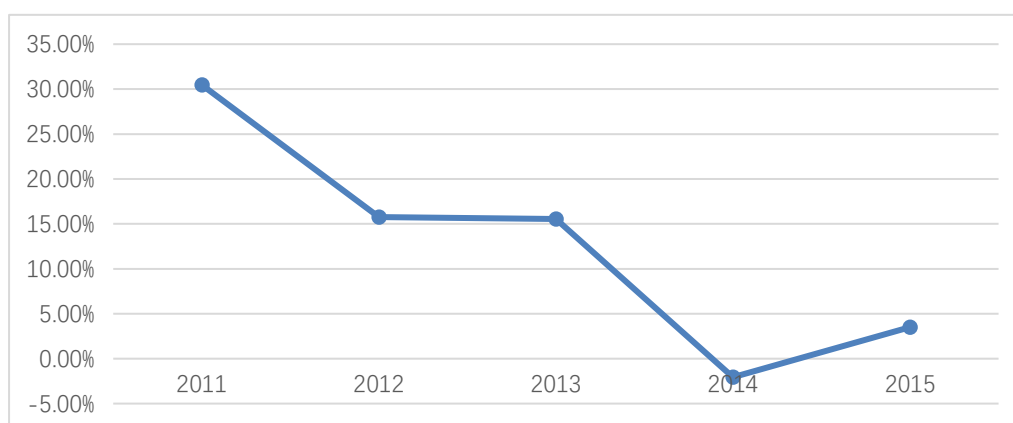
2) Operating profit margin

We know that operating profit margin measures the business efficiency, reflecting the ability of business managers to obtain profits in case of the consideration of operating costs. It is calculated based on (2.8).

Tab. 4.11 Operating profit margin

Year	2011	2012	2013	2014	2015
Operating profit margin	30.47%	15.75%	15.56%	-2.06%	3.50%

Chart 4.4 Operating profit margin



From Chart 4.4, we can clearly know that the operating profit margin has decreased almost linearly from 2011 to 2014, especially from 2011 to 2012 and 2013 to 2014. This phenomenon from 2013 to 2014 is due to an increase in the number of product development personnel to expand the businesses, an increase in advertising expenses, marketing and promotion expenses, and an increase in general and administrative personnel compensation expenses. In 2012, Ctrip increased expenses on product development in response to competitive pressure in order to capture more business opportunities in new products and services as well as in new markets. Moreover, Ctrip increased the salary, benefit and share-based compensation expenses of sales. This is why the operating profit margin decreased from 2011 to 2012.

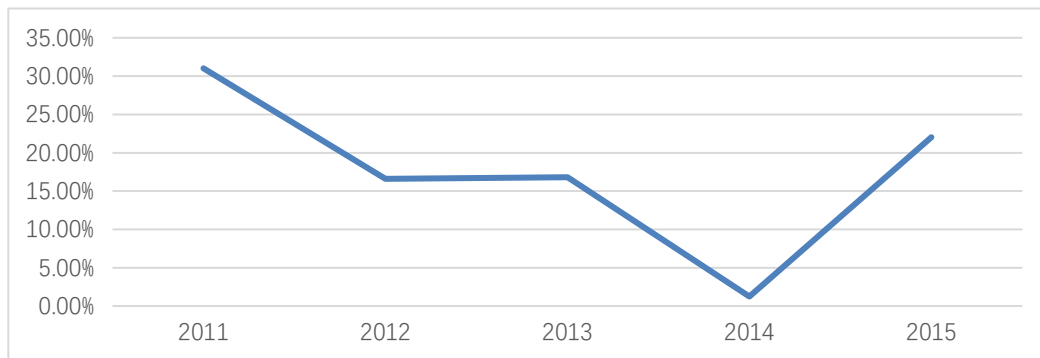
3) Net profit margin

From Chapter 2, we understand that net profit margin measures the ability of the company to obtain sales revenue during a certain period. It is calculated based on (2.9).

Tab. 4.12 Net profit margin

Year	2011	2012	2013	2014	2015
Net profit margin	31.02%	16.61%	16.82%	1.24%	22.02%

Chart 4.5 Net profit margin



From Chart 4.5, we can get that the net profit margin increased from 1.24% in 2014 to 22.02% in 2015, which is nearly same as the operating profit margin. This is because income tax expense was RMB470 millions in 2015, an increase of 259% over RMB131 millions in 2014, primarily due to the increase in our taxable income. Moreover, interest income increased by 46% from RMB305 millions in 2014 to RMB446 millions in 2015 due to the increased cash generated from operations and financing activities in 2015. Moreover, interest expense increased by 86% from RMB162 millions in 2014 to RMB302 millions in 2015.

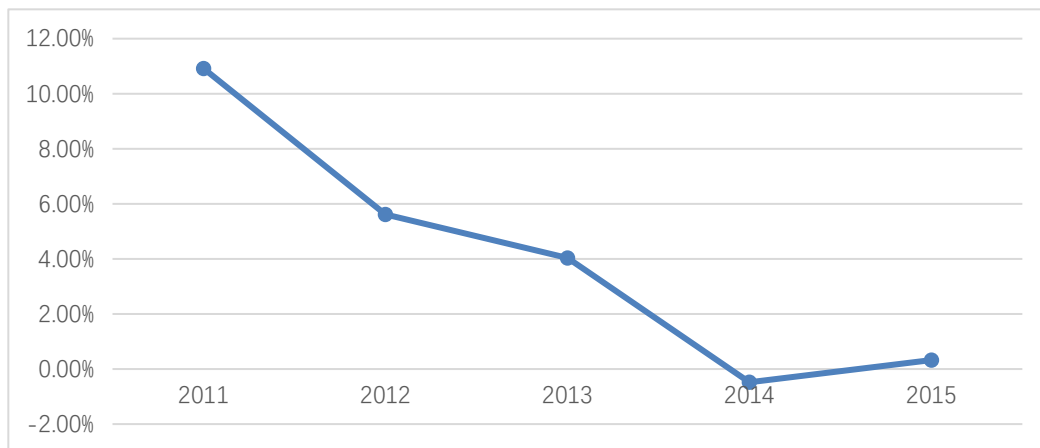
4) Return on assets

As before we have discussed, return on assets measures the return earned by a company on its assets, the higher ROA, the higher efficiency of the use of assets. The ratios are calculated based on (2.10) or (2.11).

Tab. 4.13 Return on assets

Year	2011	2012	2013	2014	2015
Return on assets	10.92%	5.61%	4.03%	-0.48%	0.32%

Chart 4.6 Return on assets



We can see from Chart 4.6 that return on assets was always decreasing during the period except 2014. The reason why the return on assets was negative in 2014 is that the operating expenses were too large, which has been explained. As we know, the higher the return on assets, the higher the efficiency of the use of assets. But, the return on assets of Ctrip is decreasing, so the efficiency of the use of assets is pretty low and the profitability of the enterprise were weaker.

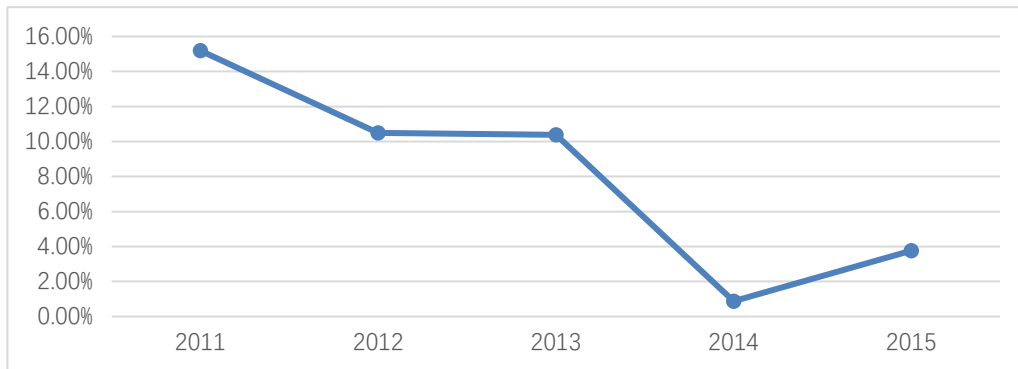
5) Return on equity

The calculation of return on equity is based on (2.12).

Tab. 4.14 Return on equity

Year	2011	2012	2013	2014	2015
Return on equity	15.19%	10.49%	10.38%	0.88%	3.77%

Chart 4.7 Return on equity



From Chart 4.7 it is apparent, as the same as the return on assets, the return on equity was always decreasing from 2011 to 2015 except 2014. It means that the return by investing was decreasing. But, we do not worry this result, because since Ctrip increased the investment in 2015, the return on equity has increased. It shows that the return by investing played an important role gradually.

4.2.2 Solvency ratios

Firstly, we pick some effective data to calculate solvency ratios.

Tab. 4.15 Data used to calculate profitability ratios (in millions of CNY)

Year	2011	2012	2013	2014	2015
Total debts	2616	5085	12088	20832	55158
Total assets	9761	11670	20818	31210	118843
Equity	7145	6585	8730	10378	63685

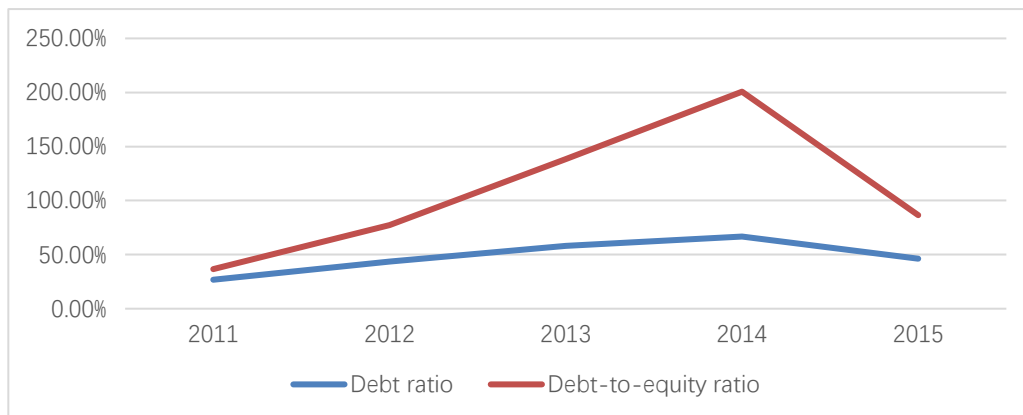
The calculation of debt ratio is based on (2.13) and debt-to-equity ratio is based on (2.14).

Then, we combine the debt ratio and the debt-to-equity ratio to analyze.

Tab.4.16 Solvency ratios

Year	2011	2012	2013	2014	2015
Debt ratio	26.80%	43.57%	58.07%	66.75%	46.41%
Debt-to-equity ratio	36.61%	77.22%	138.47%	200.73%	86.61%

Chart.4.8 Solvency ratios



1) Debt ratio

During the period analyzed, the debt ratio increased from 26.80% in 2011 to 66.75%, but decreased in 2015. It means that Ctrip has increased the funds of production and operation from 2011 to 2014. In 2015, because of the mergers and acquisitions, the assets of Ctrip got too large. In the meantime, Ctrip borrowed lots of funds from creditors, so the debts also got big, but still less than assets. In the end, the debt ratio decreased from 2014 to 2015.

2) Debt-to-equity ratio

We can see that the trend of debt-to-equity ratio is similar with the debt ratio. Debt-to-equity ratio reached the top of 200.73% in 2014. The reason is also similar with the above. In 2014, Ctrip prepared the mergers and acquisitions of Qunar, while this process needed more funds to continuing. So the debts got more and more, which led to the top of debts in 2014.

In the end, debt-to-equity ratio naturally got the top in 2014. Although debt-to-equity ratio increased from 2011 to 2014, but it existed the high risk to repay the debts.

4.2.3 *Liquidity ratios*

In this part, we will calculate current ratio, quick ratio and cash ratio. Then we evaluate the ability of Ctrip to meet its short-term obligations from 2011 to 2015.

Firstly, we pick some effective data to calculate liquidity ratios.

Tab 4.17 Data used to calculate liquidity ratios. (in millions of CNY)

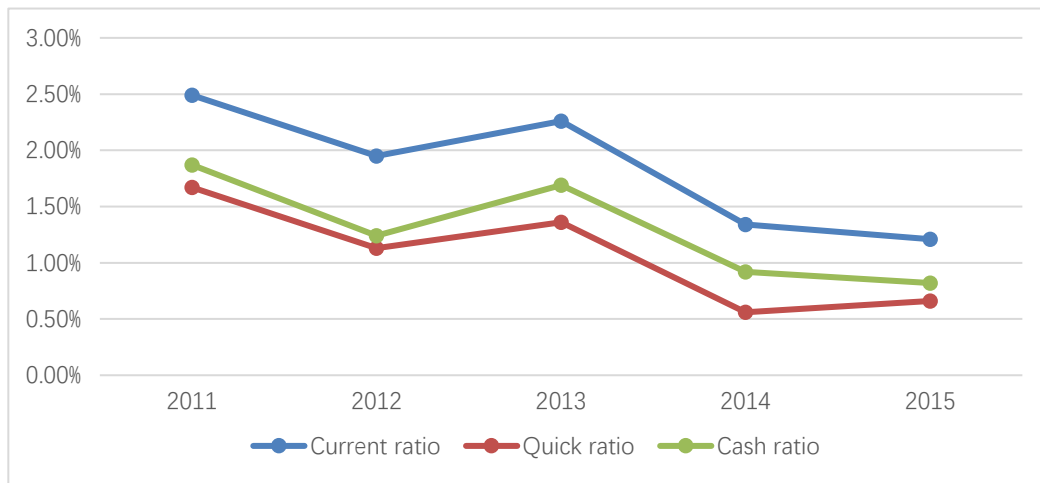
Year	2011	2012	2013	2014	2015
Current assets	6398	7644	14365	17077	40601
Cash and cash equivalents	3503	3421	7138	5300	19215
Accounts receivable	789	984	1518	1827	3151
Marketable securities	1288	1409	3635	6439	8236
Current liabilities	2568	3910	6368	12715	33666

Then, we combine the current ratio, quick ratio and cash ratio to analyze. In Chapter 2, we have knew the calculations of liquidity ratios, they are based on (2.16) or (2.17), (2.18) and (2.19).

Tab 4.18 Liquidity ratios (%)

Year	2011	2012	2013	2014	2015
Current ratio	2.49	1.95	2.26	1.34	1.21
Quick ratio	1.67	1.13	1.36	0.56	0.66
Cash ratio	1.87	1.24	1.69	0.92	0.82

Chart.4.9 Liquidity ratios



1) Current ratio

The trend of current ratio is approximately decreasing over the five years. We can see current ratio decreased from 226% in 2013 to 121% in 2015. This is because the increase of current liabilities was larger than current assets. From the Tab.4.16, it shows that current assets increased from CNY 14365 millions to CNY 40601 millions, and current liabilities increased from CNY 6368 millions to CNY 33666 millions. Before 2015, Ctrip has finished the merger and acquisition, so Ctrip needed more short-term liabilities to grow itself. As we know, the higher the current ratio, the better the capable of paying its immediate and short-term obligation is. In addition, current ratio should be around two, we can see only current ratio in 2011 and 2013 exceeded two.

2) Quick ratio

The quick ratio decreased from 167% in 2011 to 66% in 2015. This is because the increase of current liabilities was larger than the quick assets. From the Tab.4.16, it shows that current liabilities increased from CNY 2568 millions to CNY 33666 millions and quick assets

increased from CNY 4292 millions to CNY 22366 millions during the five years. The same as the current ratio, Ctrip borrowed more money to enlarge its structure. In general, quick ratio should be around one. But we can see that quick ratio got the lowest in 2014, which means it had the highest risk to make debts repayment because of the absence of liquid assets.

3) Cash ratio

The cash ratio decreased from 187% in 2011 to 82% in 2015. This is because cash and marketable securities were doubled to be increased, but the speed of increasing still was slower than current liabilities. The decreasing of cash ratio was benefit to Ctrip, because it means that Ctrip had good way to use liquid assets. We can see cash ratio increased from 2012 to 2013. The main reason is that Ctrip needed to hold so much cash to pay off short-term liabilities. From the Chart 4.8, we can know that the trend of cash ratio was similar with current ratio and quick ratio. It explains that there is a mutual influences and relations between the three ratios.

4.2.4 Activity ratios

Firstly, we need pick some data to calculate activity ratios. It is showed in Tab. 4.19.

Tab. 4.19 Data used to calculate activity ratios. (in millions of CNY)

Year	2011	2012	2013	2014	2015
Revenues	3498	4159	5387	7347	10897
Total assets	9761	11670	20818	31210	118843
Account receivables	789	984	1518	1827	3151

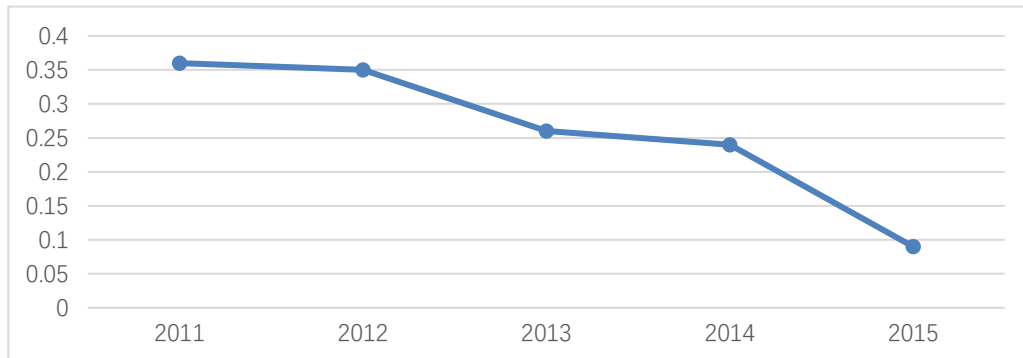
1) Total assets turnover

As we all know, total assets turnover reflects the sales capacity is stronger or weaker. It's calculated based on (2.21).

Tab. 4.20 Total assets turnover

Year	2011	2012	2013	2014	2015
Total assets turnover	0.36	0.35	0.26	0.24	0.09

Chart 4.10 Total assets turnover



From Chart 4.10 we can see that the total assets turnover was decreasing from 0.36 to 0.09 during the five years continuously. The main reason is that the revenues increased slower than total assets. Although revenues were increasing from CNY 3498 millions to CNY 10897 millions during this five years, total assets increased from CNY 9761 millions to CNY millions. The fast increasing of total assets is due to Ctrip had enlarge its scale, many companies had been acquired by Ctrip. The decreasing of the total assets turnover is a bad signal for Ctrip, because a low ratio shows that the company is generating few revenues per unit of assets. In the future, Ctrip should concentrate on developing the new products to increase sales, which can increase the assets turnover and strengthen the operating capacity.

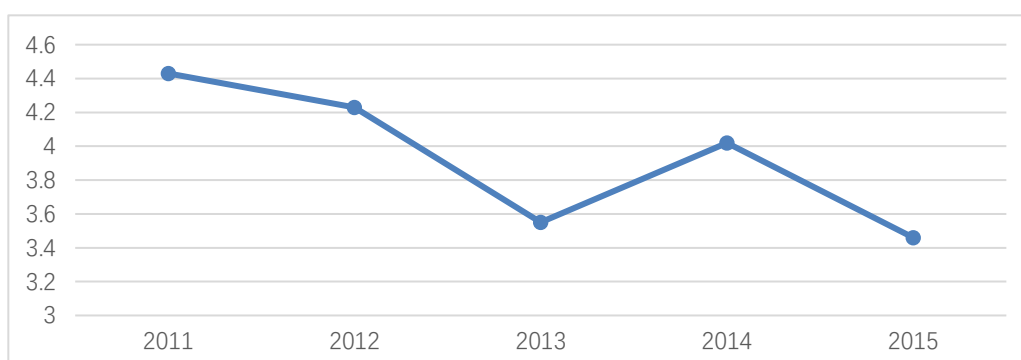
2) Accounts receivable turnover

As before said, accounts receivable turnover measures the degree of corporate accounts receivable flow. It is calculated based upon (2.22).

Tab. 4.21 Accounts receivable turnover

Year	2011	2012	2013	2014	2015
Accounts receivable turnover	4.43	4.23	3.55	4.02	3.46

Chart 4.11 Accounts receivable turnover



From Chart 4.11, it shows us that the accounts receivable turnover was decreasing from 4.43 to 3.46 during the five years nearly. This is because accounts receivable increased quickly than revenues. Accounts receivable increased from CNY 789 millions to CNY 3151 millions over the five years. The decreasing of accounts receivable turnover means that the ability of Ctrip collected the receivable was decreasing. What's more, it also means Ctrip had a low proportion of customers to pay off the debts quickly. But, accounts receivable turnover increased from 2013 to 2014 among this five years, it was a good signal for Ctrip, which explains that the collection of receivable was fast and the liquidity of assets was strong in 2014.

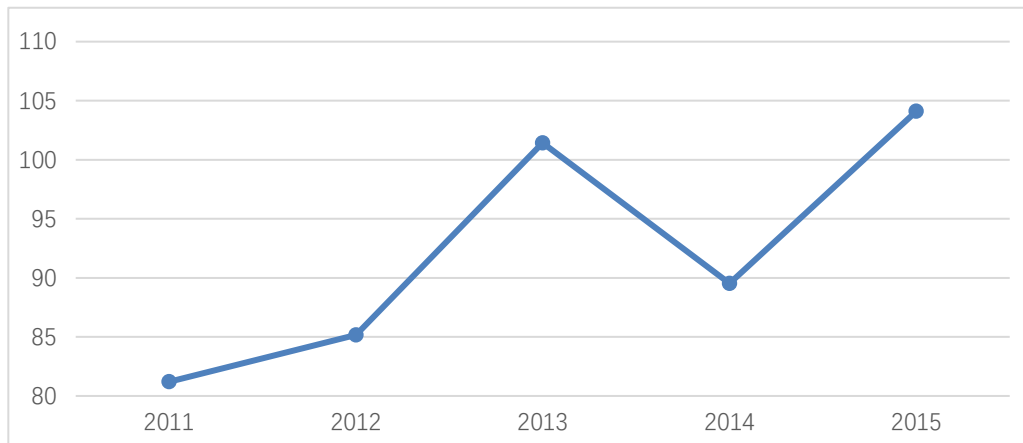
3) Average collection period

As we know, average collection period measures the ability to convert into money of receivables is stronger or weaker.

Tab. 4.22 Average collection period

Year	2011	2012	2013	2014	2015
Average collection period	81.20	85.17	101.44	89.52	104.10

Chart 4.12 Average collection period



From Chart 4.12 we can see the average collection period is increasing from 81.20 to 104.10 from 2011 to 2015. The reason why it increases is similar with accounts receivable turnover. As we know, its function is opposite to the accounts receivable turnover. So the average collection period had opposite trend according to the accounts receivable turnover. The increasing of average collection period means Ctrip had a bad ability of liquidity.

4.3 DuPont analysis

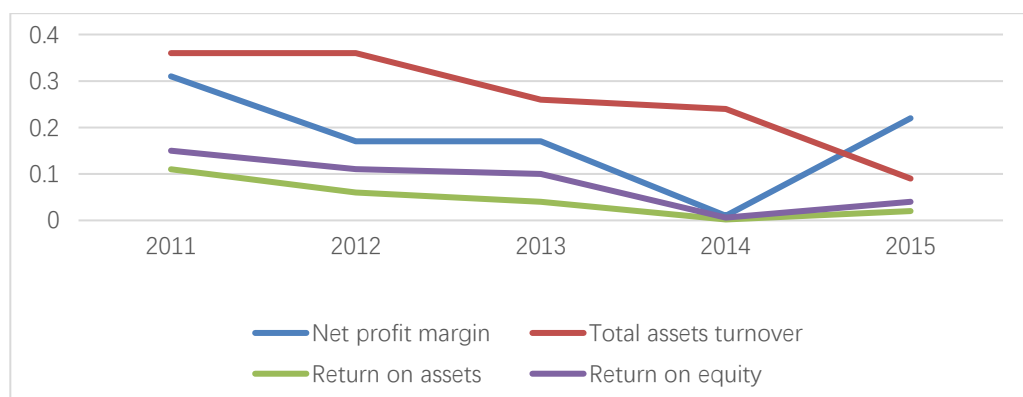
In this part, we focus on the return on equity. As we all know, return on equity can be divided into three components: net profit margin, total assets turnover and financial leverage. While net profit margin is divided into other three components: tax burden, interest burden and operating profit margin. So, we can combine they to get the return on equity.

We can see more details on the Tab.4 .23.

Tab. 4.23 DuPont analysis

Year			2011	2012	2013	2014	2015
Tax burden	$\frac{\text{EAT}}{\text{EBT}}$	(1)	0.81	0.70	0.76	0.41	0.84
Interest burden	$\frac{\text{EBT}}{\text{EBIT}}$	(2)	1.26	1.51	1.43	-1.47	7.53
Operating profit margin	$\frac{\text{EBIT}}{\text{Revenues}}$	(3)	0.30	0.16	0.16	-0.02	0.03
Net profit margin	$\frac{\text{EAT}}{\text{Revenues}}$	(4)	0.31	0.17	0.17	0.01	0.22
Total assets turnover	$\frac{\text{Revenues}}{\text{Average total assests}}$	(5)	0.36	0.36	0.26	0.24	0.09
Return on assets	$\frac{\text{EAT}}{\text{Average total assests}}$	(6)	0.11	0.06	0.04	0.002	0.02
Financial leverage	$\frac{\text{Average total assests}}{\text{Average total equity}}$	(7)	1.37	1.77	2.38	3.01	1.87
Return on equity	$\frac{\text{EAT}}{\text{Average total equity}}$	(8)	0.15	0.11	0.10	0.006	0.04

Chart. 4.13 Return on equity



In the Tab. 4.22, (4) = (1)×(2)×(3), (6) = (4)×(5), (8) = (6)×(7).

Table 4.23 shows the DuPont analysis of Ctrip. To get the return on equity, it was divided into different parts. The chart shows that return on equity has nearly decreased over the five years except for 2014, it was the lowest in 2014. This is mainly because net profit margin and return on assets decreased from 2011 to 2015, return on equity changed with their change.

To be more detailed and get a better understanding, we focus on net profit margin, which is divided into three components, including tax burden, interest burden and operating profit margin. Except for 2014, there is a decreasing trend of net profit margin. Although interest burden and operating profit margin were negative, they were multiplied to be positive net profit margin. The fact that interest burden and operating profit margin were negative in 2014 shows that operating income was negative in 2014. But earnings before taxes were positive, which means that Ctrip had a big amount of interest income in 2014 due to Ctrip increased cash generated from operations. One point to be emphasized, in 2014, only Ctrip made profits among the same industries. So Ctrip has a strong competition, it should improve its income and decrease costs. Even though net profit margin and return on assets are declining, we believe the company will be more and more stronger.

In addition, except for year 2008, return on equity is decreasing. We can see that the return on equity of Ctrip got the lowest in 2014, which resulted that Ctrip was unable to provide more returns to its shareholders. Looking more closely of the return on equity, we can see that the financial leverage got the biggest in 2104, this is because Ctrip had big assets because of mergers and acquisitions. Also, it had the same situation of assets turnover in 2014. In the end,

from the relationship between net profit margin, total assets turnover and financial leverage, we can analyze the return on equity of Ctrip, this is the method of DuPont analysis.

4.4 Influence quantification

In this part, we will apply the method of influence quantification, which includes methods of gradual changes and logarithmic decomposition method.

4.4.1 Methods of gradual changes

We focus on the return on equity in this part, so the basic ratio is return on equity, the component ratios are: net profit margin (EAT/Revenues), total assets turnover (Revenues/Assets), and financial leverage (Assets/Equity). Then we calculate the return on equity every two years.

1) Gradual changes of ROE between 2011 and 2012.

Tab.4.24 Gradual changes of ROE between 2011 and 2012.

	$a_0(2011)$	$a_1(2012)$	Δ_a	$\Delta_{x_{ai}}$	Order
$a_1 = \text{EAT/Revenues}$	0.31	0.17	-0.14	-0.069	3
$a_2 = \text{Revenues/Assets}$	0.36	0.36	0	0	2
$a_3 = \text{Assets/Equity}$	1.37	1.77	0.4	0.024	1
Sum	x	x	x	-0.04	x

Table 4.24 shows financial leverage has the highest impact on the ROE from 2011-2012. The total change of ROE is -0.04 by using the method of gradual changes, which is the same result with the absolute change of the ROE. We can see that the change of financial leverage was the biggest among the three component ratios, so Ctrip should increase assets in the future in order to increase ROE.

2) Gradual changes of ROE between 2012 and 2013.

Tab 4.25 Gradual changes of ROE between 2012 and 2013.

	$a_0(2012)$	$a_1(2013)$	Δ_a	$\Delta_{x_{ai}}$	Order
$a_1 = \text{EAT/Revenues}$	0.17	0.17	0	0	2
$a_2 = \text{Revenues/Assets}$	0.36	0.26	- 0.1	- 0.03	3
$a_3 = \text{Assets/Equity}$	1.77	2.38	0.61	0.02	1
Sum	x	x	x	- 0.01	x

Table 4.25 shows financial leverage has the most impact on ROE between 2012 and 2013.

The total change of ROE is -0.01 by using the method of gradual changes, which is also similar with the absolute change of the ROE. Moreover, among the three ratios, only total assets turnover decreased from 2012 to 2013. This is because the liquidity of assets in 2013 was slower than 2012. Ctrip should have more liquid assets to increase ROE.

3) Gradual changes of ROE between 2013 and 2014.

Tab 4.26 Gradual changes of ROE between 2013 and 2014.

	$a_0(2013)$	$a_1(2014)$	Δ_a	$\Delta_{x_{ai}}$	Order
$a_1 = \text{EAT/Revenues}$	0.17	0.01	-0.16	- 0.09	3
$a_2 = \text{Revenues/Assets}$	0.26	0.24	-0.02	- 0.005	2
$a_3 = \text{Assets/Equity}$	2.38	3.01	0.63	0.001	1
Sum	x	x	x	-0.094	x

From Tab 4.26, we can see net profit margin has the smallest influence on ROE from 2013-2014. The total change of ROE is -0.094 by using the method of gradual changes, which is similar with the absolute change of the ROE. We also can get other information from Tab

4.25, the net profit margin decreased biggest among the component ratios, for Ctrip, it should improve the technology and develop new products to increase sales to improve income.

4) Gradual changes of ROE between 2014 and 2015.

Tab 4.27 Gradual changes of ROE between 2014 and 2015.

	$a_0(2014)$	$a_1(2015)$	Δ_a	$\Delta_{x_{ai}}$	Order
$a_1 = \text{EAT/Revenues}$	0.01	0.22	0.21	0.151	1
$a_2 = \text{Revenues/Assets}$	0.24	0.09	- 0.15	-0.094	3
$a_3 = \text{Assets/Equity}$	3.01	1.87	- 1.14	-0.023	2
Sum	x	x	x	0.034	x

From Tab.4.27, we can see total assets turnover has the smallest influence on ROE. The total change of ROE is 0.034 by using the method of gradual changes, which is similar with the absolute change of the ROE. We need increase sales to gain more revenues in order to increase total assets turnover.

4.4.2 Logarithmic decomposition method

Firstly, to make statements more concise, we only pick the data of year 2014 and year 2015 to compare the result.

$$\text{The index of the change: } I_{\text{ROE}} = \frac{\text{ROE}_1}{\text{ROE}_0} = 6.667$$

Tab 4.29. Logarithmic decomposition of ROE

	$\mathbf{a_0(2014)}$	$\mathbf{a_1(2015)}$	$\mathbf{I_a}$	$\Delta_{x_{ai}}$	Order
$\mathbf{a_1= EAT/Revenues}$	0.01	0.22	22	0.056	1
$\mathbf{a_2=Revenues/Assets}$	0.24	0.09	0.375	- 0.015	3
$\mathbf{a_3=Assets/Equity}$	3.01	1.87	0.621	- 0.007	2
Sum	x	x	x	0.034	x

In a word, although the way to calculate the return on equity is not same, the final results are the same. So we can choose different way to calculate the basic ratio according to different situation.

5 Conclusion

The goal of the thesis was to evaluate the financial situation of the company Ctrip by using the data from annual reports for period 2011 to 2015.

The thesis is divided into five chapters: the introduction, the conclusion, the theoretical methods of financial analysis, the basic characteristics of the company Ctrip, and financial analysis of Ctrip.

In the theoretical part, we introduced kinds of methods of financial analysis and knew the development situation of Ctrip, we can find that Ctrip is the biggest OTA (online travel agency) in china, and there are many strengths and weaknesses for itself.

In the practical part, we made financial analysis of Ctrip by using the financial statements from 2011-2015. Through the common-size analysis, we can find that the total assets, total liabilities and equity of Ctrip rises in a straight line during this period. Through the financial ratios analysis, we can see that nearly all the ratios in 2014 are lower than other years, this is because Ctrip invest more funds to enlarge its scale in 2014, which make lots of expenses. Through the DuPont analysis, we can know that the financial leverage has the strongest influence for ROE, the net profit margin has the least influence for ROE generally. Through the influence quantification of ROE, we can see that ROE is based on the net profit margin, total assets turnover and financial leverage. If we change the orders of the component ratios, we can see the results of the net profit margin, total assets turnover and financial leverage are different, but it can not influence the ROE.

Nowadays, faced with fierce competition in the same industry, Ctrip finished strategic integration with its rich accumulations and the core of the advantages. In the future, Ctrip will be stronger and stronger. However, Ctrip not only face domestic competitions, but the global competitions, so Ctrip should develop unique products and services to face the bigger challenges.

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List of Abbreviations

A	Assets
E	Equity
EBIT	Earnings before interests and taxes
EAT	Earnings after taxes
GPM	Gross profit margin
OPM	Operating profit margin
NPM	Net profit margin
ROA	Return on assets
ROE	Return on equity
ACP	Average collection period
TAT	Total assets turnover
CNY	unit of RMB
OTA	Online travel agency

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List of Annexes

Annex 1: The balance sheet of Ctrip

Annex 2: The income statement of Ctrip

Annex 3: The cash flow statement of Ctrip

Annex 1: The balance sheet of Ctrip (CNY)

	2011	2012	2013	2014	2015
Cash and cash equivalents	3,503,428,418	3,421,532,962	7,138,344,814	5,300,887,799	19,215,674,674
Restricted cash	211,636,294	768,228,577	739,543,614	836,394,951	2,286,882,592
Short-term investments	1,288,471,562	1,408,664,335	3,635,090,955	6,438,854,587	8,235,785,516
Accounts receivable, net	789,036,329	983,804,403	1,518,230,029	1,826,765,949	3,150,768,364
Due from related parties	4,994,560	5,328,170	21,774,669	10,568,937	961,791,458
Prepayments and other current assets	561,193,151	993,820,540	1,215,756,287	2,469,707,335	6,749,965,827
Deferred tax assets, current	39,782,201	61,840,526	96,979,500	193,503,366	—
Total current assets	6,398,542,515	7,643,619,513	14,365,419,868	17,076,682,924	40,600,868,431
Long-term deposits and prepayments	155,360,492	210,618,310	559,185,652	225,269,063	486,785,968
Long-term loan receivable	0	0	178,584,102	192,871,939	578,524,154
Long-term receivables due from related parties	0	0	8,166,667	510,039,284	543,911,586
Land use rights	113,460,899	110,659,284	107,476,794	104,568,868	102,328,181
Property, equipment and software	683,903,870	1,123,937,191	1,412,943,693	5,220,626,461	5,555,959,499
Investments	1,305,145,043	1,437,247,949	2,857,213,480	5,318,756,447	13,870,523,498
Goodwill	798,601,767	822,585,341	972,531,184	1,892,507,708	45,690,440,903

Intangible assets	306,420,192	321,483,420	356,653,022	668,202,371	11,007,915,171
Deferred tax assets, non-current	0	0	0	—	405,334,569
Total assets	9,761,434,778	11,669,751,008	20,818,474,462	31,209,525,065	118,842,591,960
Short-term debt	—	453,478,628	774,599,341	3,560,488,641	12,710,213,398
Accounts payable	763,256,074	1,023,672,151	1,637,545,824	2,304,111,525	5,944,501,681
Due to related parties	9,195,558	10,395,726	11,216,780	17,049,103	2,062,965,953
Salary and welfare payable	145,524,036	229,969,924	257,641,763	525,157,105	1,196,691,839
Taxes payable	220,604,123	216,456,010	315,299,656	339,452,319	1,641,379,425
Advances from customers	1,090,852,066	1,414,865,769	2,451,931,450	3,937,477,522	5,955,827,306
Accrued liability for customer reward program	161,838,531	217,548,153	284,668,935	430,852,908	593,346,816
Other payables and accruals	176,789,865	343,757,881	635,104,949	1,600,113,658	3,561,167,650
Total current liabilities	2,568,060,253	3,910,144,242	6,368,008,698	12,714,702,781	33,666,094,068
Deferred tax liabilities, non- current	48,308,692	53,309,153	63,197,155	132,506,644	3,045,259,390
Long-term Debt	—	1,121,418,000	5,657,182,650	7,984,588,052	18,354,608,260
Other long-term Liabilities	0	0	0	—	91,702,261
Total liabilities	2,616,368,945	5,084,871,395	12,088,388,503	20,831,797,477	55,157,663,979
Total shareholders' equity	7,145,065,833	6,584,879,613	8,730,085,959	10,377,727,588	63,684,927,981

Total liabilities and shareholders' equity	9,761,434,778	11,669,751,008	20,818,474,462	31,209,525,065	118,842,591,960
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Annex 2: The income statement of Ctrip (CNY)

	2011	2012	2013	2014	2015
Hotel reservation	1,486,898,858	1,702,500,571	2,214,170,887	3,201,426,933	4,616,649,394
Air-ticketing	1,437,118,164	1,690,285,903	2,161,784,259	2,950,072,484	4,453,885,749
Packaged-tour	534,640,183	689,660,631	935,684,729	1,055,369,205	1,667,945,350
Corporate travel	161,610,123	199,756,068	266,988,534	373,407,012	473,245,440
Others	106,036,864	126,989,085	138,388,653	192,281,473	285,220,475
Total revenues	3,726,304,192	4,409,192,258	5,717,017,062	7,772,557,107	11,496,946,408
Less: business tax and related surcharges	-228,219,564	-250,401,009	-330,271,520	-425,638,738	-599,378,347
Net revenues	3,498,084,628	4,158,791,249	5,386,745,542	7,346,918,369	10,897,468,061
Cost of revenues	-805,129,784	-1,037,791,093	-1,386,767,067	-2,100,606,413	-3,043,439,819
Gross profit	2,692,954,844	3,121,000,156	3,999,978,475	5,246,311,956	7,854,128,242
Product development	-601,485,367	-911,904,722	-1,245,719,192	-2,321,348,753	-3,296,692,936
Sales and marketing	-624,599,686	-984,002,165	-1,269,412,720	-2,214,209,719	-3,087,989,953
General and administrative	-400,875,621	-570,487,457	-646,404,879	-861,550,628	-1,088,402,408
Total operating expenses	-1,626,960,674	-2,466,394,344	-3,161,536,791	-5,397,109,100	-7,473,085,297
Income from operations	1,065,994,170	654,605,812	838,441,684	-150,797,144	381,042,945
Interest income	106,002,655	165,799,964	200,068,533	304,483,544	445,767,036
Interest expense	0	0	-57,043,756	-162,354,675	-302,425,829
Other income	175,149,555	165,630,943	218,676,446	231,011,776	2345,199,518
Income before income tax	1,347,146,380	985,636,719	1,200,142,907	222,443,501	2,869,583,670

Income tax expense	-262,186,225	-294,525,956	-293,740,322	-130,821,156	-470,188,423
Net income	1,084,960,155	690,510,763	906,402,585	91,622,345	2,399,395,247

Annex 3: The cash flow statement of Ctrip (CNY)

	2011	2012	2013	2014	2015
Cash flows from operating activities:					
Net income	1,084,960,155	690,510,763	906,402,585	91,622,345	2,399,395,247
Share-based compensation	342,791,357	431,721,322	437,929,477	496,643,489	642,596,474
Equity in income of affiliates	-57,525,830	-34,343,000	-56,146,814	-187,191,141	135,780,312
Gain on deconsolidation of subsidiaries	—	-44,432,052	—	-789,193	-2,294,451,702
Loss from disposal of property, equipment and software	0	0	11,946,443	3,751,452	33,986,560
Gain on disposal of cost method investment	0	0	-4,014,829	—	—
Loss from disposal of a subsidiary	0	0	—	1,529,046	—
Loss from impairment of long-term investment	0	0	—	33,000,000	—
Provision for doubtful accounts	185,443	376,164	2,842,681	11,737,580	32,080,786
Depreciation of property, equipment and software	78,809,867	88,462,807	110,494,928	173,786,973	255,966,352
Amortization of intangible assets and land use rights	11,066,656	10,538,382	10,545,854	8,334,028	60,247,658
Deferred income tax benefit provision	-3,388,535	-22,757,864	-35,871,972	-97,573,997	86,464,693
Loss from disposal of property, equipment and software	3,379,449	653,191	0	0	0
Changes in current assets and liabilities:					
Increase in accounts receivable	-166,668,439	-193,874,838	-487,446,257	-261,973,182	-1,002,531,319
Increase (Decrease) in due from related parties	-1,732,887	-333,610	-12,363,165	2,352,014	-81,376,345
Increase in prepayments and other current assets	-203,694,403	-118,239,096	-398,015,862	-1,218,273,146	-2,224,053,491

Decrease(Increase) in long-term deposits	496,130	-7,479,664	19,406,141	-27,406,657	-381,458,105
Increase in accounts payable	166,395,703	255,160,851	537,669,487	585,953,759	2,098,144,678
Decrease (Increase) in due to related parties	-5,025,904	1,677,658	583,234	6,057,681	236,779,810
Decrease (Increase) in salary and welfare payable	-14,021,957	85,511,674	25,720,555	259,440,083	271,783,211
Increase (Decrease) in taxes payable	60,282,019	-3,054,768	98,025,837	23,797,376	281,472,256
Increase in advances from customers	487,010,431	310,497,590	1,001,717,032	1,469,414,155	2,056,500,006
Increase in accrued liability for customer reward program	40,519,230	55,805,114	67,120,782	146,183,973	162,493,908
Increase in other payables and accruals	27,476,422	147,967,182	216,281,215	438,207,218	278,988,927
Net cash provided by operating activities	1,851,314,907	1,654,367,806	2,452,827,352	1,958,603,856	3,048,809,916
Cash flows from investing activities:					
Purchase of property, equipment and software	-205,212,492	-543,123,309	-651,765,217	-4,788,676,371	-638,133,430
Cash paid for investments	-5,100,000	—	-965,421,399	-2,078,378,807	-4,232,366,913
Cash paid for acquisition, net of cash acquired	-27,532,356	-29,018,885	-119,739,607	-130,124,251	4,112,960,205
Purchase of intangible assets	-3,233,850	—	—	-9,000,000	-20,000,000
Purchase of land use rights	-9,747,800	—	0	0	0
(Increase) Decrease in restricted cash	5,527,208	-558,620,548	31,954,414	-94,988,241	-760,873,462
Increase in short-term investment	-94,647,972	-123,698,692	-2,219,940,665	-2,799,807,028	-1,447,586,170
Increase in long-term loan receivable	0	0	-178,584,102	—	-872,200,000
Cash repayment from in long-term receivables	0	0	—	496,368,000	872,200,000
Cash received from disposal of equity investment	0	0	4,209,926	—	—
Cash received from disposal of cost method investment	0	0	13,142,920	—	—

Cash received from disposal of available-for-sale investments	0	0	—	—	61,980,000
Cash received from deconsolidation of a subsidiary, net of cash disposed	0	0	—	45,569,216	-1,502,561,561
Cash received from disposal of a subsidiary net of cash disposed	0	0	—	-7,373,416	—
Disposal of a subsidiary	—	14,556,966	0	0	0
Net cash used in investing activities	-339,947,262	-1,239,904,468	-4,086,143,730	-9,366,410,898	-4,426,581,331
Cash flows from financing activities:					
Proceeds from short-term bank loan	—	453,478,628	321,120,713	2,325,694,972	644,411,544
Proceeds from exercise of share option	54,416,536	81,911,154	180,261,090	184,579,173	52,117,597
Repurchase of common stock	-158,761,225	-1,733,127,675	—	-446,155,147	-872,290,891
Cash paid for acquisition of additional stake in subsidiaries	0	0	-82,143	-36,792,354	-46,236,902
Cash received (paid) from noncontrolling investors	-10,404,359	-40,289,731	—	139,393,178	275,972,483
Proceeds from issuance convertible preferred shares by a subsidiary	—	63,709,828	132,709,989	186,475,640	725,512,513
Proceeds from issuance of senior convertible notes, net of issuance costs	—	1,097,195,400	4,723,511,720	3,069,000,000	14,736,200,000
Proceeds from sale of warrants	—	167,503,950	470,838,904	—	523,404,000
Purchasing of Purchased Call Option	—	-346,009,222	-842,694,944	—	-805,504,000
Cash inflow for Capped equity	0	0	264,745,135	—	—
Cash outflow for Capped equity	—	-259,935,853	0	0	0
Cash received from issuance of common stock	—	—	0	0	0
Early Termination of Call Option	0	0	70,270,919	—	—
Convertible Notes early conversion	0	0	-4,706,419	—	—

Net cash (used in) provided by financing activities	-114,749,048	-515,563,521	5,315,974,964	5,422,195,462	15,233,586,344
Effect of foreign exchange rate changes on cash and cash equivalents	-47,125,290	19,204,727	34,153,266	148,154,565	58,971,946
Net increase (decrease) in cash and cash equivalents	1,349,493,307	-81,895,456	3,716,811,852	-1,837,457,015	13,914,786,875
Cash and cash equivalents, beginning of year	2,153,935,111	3,503,428,418	3,421,532,962	7,138,344,814	5,300,887,799
Cash and cash equivalents, end of year	3,503,428,418	3,421,532,962	7,138,344,814	5,300,887,799	19,215,674,674